Limitations of MQF Tool

Known Limitations of MQF tool:

- 1. Not in sync with IDPH ELR Constrained profile Usage.
- 2. Not in sync with IDPH ELR Constrained profile use of HL7 v2.7.1 conditionality conventions.
- 3. Known limitation MQF Vocabulary validation limited to laboratory related tests. So ignore for Epidemiologically Important Information OBXs
- 4. MQF Vocabulary validation tool not updated to latest versions of LOINC (v2.36) and SNOMED (07/31/2011)
- 5. No ICD 10 in PHINVADS ELR v251 Value Sets

Checklist after validating a message in MQF

From the ELR receiver perspective, we recommend following the IDPH ELR constrained profile.

Known Errors for Structural Validation:

- 1. MQF validates OBX.8 Abnormal Flags length to incorrect field length. Need to shorten field to move on to vocabulary validation
- 2. OBX.6 is R for SN or NM types in OBX.2 but passes validation if empty
- 3. PID.34 is R if PID.33 is populated but passes MQF validation if empty
- 4. OBX5.1 and OBX5.3 are R but passes MQF validation if empty
- 5. OBX.1 Set ID is allowed to repeat in same order_observation group
- 6. OBR.1 Set ID is allowed to repeat in same patient_result group
- 7. PID.34 is R if PID.33 is populated but passes MQF validation if empty
- 8. MQF definition uses /0d/0a as a segment separator which is incorrect.
- 9. Addition of truncation delimiter "#" ($|^{\sim}$ \&#|) causes a error in the MQF validation
- 10. Minimum length for CX.5 field is 2, so "U" unknown identifier causes structural error.
- 11. The receiver profile errors if there is no local version number in OBR4.8 Universal Service Identifier, This should be RE. The other instances of CWE datatypes in the message will not give this error.
- 12. ELR Condition predicate: "The specimen group is required for the parent Order_Observation Group in the message". If SPM is only in child, MQF still validates structurally which is an error

13. MQF doesn't recognize the ORC conditional predicate for ELR: ELR Condition predicate: The first ORDER_OBSERVATION group must contain an ORC segment (containing ordering facility information) if no ordering provider information is present in OBR-16 or OBR-17.

Known Errors for Data Validation:

- 1. MQF is not doing vocabulary validation for XCN.13 Identifier Type Code
- 2. Universal Id type not being content validated to "ISO" in HD.3, EI.4, EIP.4 and EIP.8 elements
- 3. MQF fails to content validate OBR 16.13 which should contain value a from HL70203 value set
- 4. MQF fails vocabulary validation for second triplet with local codes in OBX5 even if there standard codes (SNOMED) in first triplet
- 5. MQF fails vocabulary validation for appropriate HL70189 coding in PID.22 ethnicity
- 6. MQF vocabulary validation doesn't support HL70487 vocabulary for SPM.4 specimen type-fixed
- 7. MQF vocabulary validation doesn't support HL70488 vocabulary for SPM.7 specimen collection fixed
- 8. MQF vocabulary validation doesn't support HL7005 vocabulary for PID.10 Race
- 9. MQF doesn't allow OID in OBX 5.14 Coding System OID
- 10. MQF content error for valid Y/N for HL70136 value set.
- 11. MQF content error for valid country code ISO3166-1.